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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/067,586 | 02/04/2002 | Raymond T. Hsu | 020220 | 5862 |
| 23696 | 7590 | 11/17/2005 | EXAMINER | |
| QUALCOMM, INC 5775 MOREHOUSE DR. SAN DIEGO, CA 92121 | | | PHAM, TITO QUANG | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2667 | |

DATE MAILED: 11/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|---|----------------------------|--|
| Office Action Summary | Application No. 15 10/067,586 | Applicant(s) HSU ET AL. | |
| | Examiner Tito Pham | Art Unit 2667 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9, 15 and 17 is/are allowed.
- 6) ☒ Claim(s) 1, 2, 8, 16 and 18-29 is/are rejected.
- 7) ☒ Claim(s) 3-7, 10-14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 2, and 16 are rejected under 35 U.S.C. 102(e) as being anticipated by Komuro (US Pat. 6,819,663).

- With respect to claims 1 and 16, Komuro discloses a communication system supporting Internet Protocol (IP) communication (Fig. 4), a method comprising: identifying a loss of a bearer connection for an IP communication (column 17 lines 53-58, lines 62-64) (abnormality in the transmission rate is considered a loss of connection wherein there is no packet transmitted between two nodes); providing a notification of the loss of the bearer connection (column 17 lines 64-66); and terminating the IP communication (column 17 lines 66-67).
- Regarding claim 2, Komuro discloses the IP communication is a voice communication (figure 5).

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3. Claims 18, 19, 21, 22, 28, and 29 are rejected under 35 U.S.C. 102(e) as being anticipated by Zhang et al. (US Pat. 6,792,457) (hereinafter Zhang).

- With respect to claims 18, 21, 28, and 29, Zhang discloses a communication system supporting Internet Protocol (IP) communications, the communication system employing an accounting unit (figure 3), a method comprising: receiving a request to stop accounting for a first IP communication the request to stop accounting corresponding to loss of a first Point-to-Point Protocol (PPP) session (column 6 lines 20-31, column 7 lines 17-20); if a second PPP session is active for the IP communication, ignoring the request to stop accounting (column 9 lines 45-51, column 7 lines 2-12); and if the first PPP session is the only active PPP session for the first IP communication, terminating the IP communication (column 6 lines 20-21, column 7 line 1).
- Regarding claim 19, Zhang discloses a request to start accounting initiate an active PPP session (column 9 lines 27-32).
- Regarding claim 22, Zhang discloses the apparatus is an Authentication Authorization Accounting (AAA server) (figure 1).

4. Claims 24, 25 and 27 are rejected under 35 U.S.C. 102(e) as being anticipated by Skog et al. (US Pub. No. 2001/0028636) (hereinafter Skog).

- With respect to claims 24 and 27, Skog discloses a communication system supporting Internet Protocol (IP) communications (figure 1), a method comprising: receiving a request to stop accounting for a first PPP session of an IP communication; and sending notification of the request to stop

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accounting to a session control manager supporting the first PPP session (paragraph 27).

- Regarding claim 25, Skog discloses terminating the IP communication by removing the IP address (paragraph 27).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claims 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Komuro in view of Govindarajan et al (US Pat. App. Pub 2003/0028806) (hereinafter Govindarajan).

With respect to claim 8, Komuro teaches all elements in claim 1 (see USC 102 rejection) . Komuro does not teach the IP communication uses a Session

Initiation Protocol (SIP), and wherein terminating the IP communication comprises generating a BYE message. However, Govindarajan teaches IP communication uses a Session Initiation Protocol (paragraph 26); and wherein terminating the IP communication comprises generating a BYE message (paragraph 38). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include in Komuro the Session Initiation Protocol for the purpose of facilitate the Voice over IP session based on SIP's capability of initiating, maintaining, and terminating session for multimedia elements such as voice, video, and instant messaging. One skilled in the art would have been motivated to generate the claimed invention with a reasonable expectation of success.

8. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zhang et al. (US Pat. 6,792,457) in view of Amin et al (US Pat. 6,854,014) (hereinafter Amin).

With regards to claim 20, Zhang discloses all the elements as described in claim 19 above. Zhang does not teach the system supports Diameter Protocol communications. However, Amin reveals an accounting system utilizing Diameter Protocol (column 2 lines 45-59). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include in Zhang the Diameter Protocol to support its accounting system for the purpose of cost saving on equipment and training by using a "more flexible and secure protocol that supports Authentication, Authorization, and Accounting functionality"

(Amin, column 2 lines 66-67). One skilled in the art would have been motivated to generate the claimed invention with a reasonable expectation of success.

9. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Skog et al. (US Pat. App. Pub. 2001/0028636) (hereinafter Skog) in view of Amin et al. (US Pat. 6,854,014).

With regards to claim 23, Skog discloses a communication supporting Internet Protocol (IP) communications (figure 1), an apparatus comprising: means for receiving a request to stop accounting for a first IP communication, the request to stop accounting corresponding to loss of a first Point-to-Point (PPP) session; means for terminating the IP communication if the first PPP session is the only active PPP session for the first IP communication (paragraph 27). Skog does not disclose having means for generating Diameter Protocol request, wherein the Diameter Protocol requests include a notification of loss of the first PPP session; and means for receiving Diameter Protocol answer. However, Diameter is a well-known protocol for use in accounting session (column 2 lines 45-65). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include in Skog the Diameter Protocol for the purpose of providing a "more flexible and secure protocol that supports Authentication, Authorization, and Accounting functionality" (Amin, column 2 lines 66-67). One skilled in the art would have been motivated to generate the claimed invention with a reasonable expectation of success.

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10. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Skog et al. (US Pub. 2001/0028636) in view of Govindarajan et al. (US Pub 2003/0028806).

With regards to claim 26, Skog discloses all elements as described in claim 25 (see 102 rejection above). Skog does not disclose the IP communication uses a Session Initiation Protocol (SIP), and wherein terminating the IP communication comprises sending a BYE message. However, Govindarajan reveals terminating the IP communication comprises sending a BYE message (paragraph 38).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include in Skog the SIP for the purpose of facilitate the Voice over IP session based on SIP's capability of initiating, maintaining, and terminating session for multimedia elements such as voice, video, and instant messaging. One skilled in the art would have been motivated to generate the claimed invention with a reasonable expectation of success.

Allowable Subject Matter

11. Claims 9, 15, and 17 are allowed.

12. Claims 3-7, 10-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

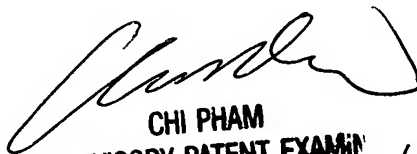
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tito Pham whose telephone number is 571-272-8617. The examiner can normally be reached on 8-5 PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

tqp


CHI PHAM
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 11/14/05